

# AIR POLLUTION CONTROL DISTRICT OF JEFFERSON COUNTY, KENTUCKY TITLE V OPERATING PERMIT

Permit No.: 141-97-TV Plant ID: 0014

Effective Date: 05 April 2001 Expiration Date: 05 April 2006

UTM Northing: 4231.8 UTM Easting: 606.9

SIC No.: 3353 NAICS: 331315 AFS: 00014

Permission is hereby given by the Air Pollution Control District of Jefferson County to operate

equipment located at:

Alcan Aluminum Corp. 1430 S. 13th Street Louisville, KY 40210

in accordance with the permit application on file with the District and under the conditions stipulated herein. This permit and the authorization to operate the emission units listed herein shall expire on midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the owner or operator may continue to operate in accordance with the terms and conditions of this permit beyond the expiration date, provided that a complete renewal application is submitted to the District no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Applicant for Permit: Patrick Abell

Title of Applicant: Safety, Health and Environmental Supvr.

Date Application Received: 21 April 1997

Date Application Administratively Complete: 17 June 1997

Date Public Notice Given: 28 May 2000

Reviewing Engineer ( 3 )

Air Pollution Control Officer

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## **Abbreviations and Acronyms**

AC - Additional ConditionAFS - AIRS Facility Subsystem

AIRS - Aerometric Information Retrieval System

APCD - Air Pollution Control District ASL - Adjusted Significant Level

atm - Atmosphere

BACT - Best Available Control Technology

Btu - British Thermal Unit EC - Degrees Centigrade

CEMS - Continuous Emission Monitoring System

CAAA - Clean Air Act Amendments (15 November 1990)

cf - Cubic foot

DOE - District Only Enforceable

EF - Degrees Fahrenheit

gal - Gallon

HAP - Hazardous Air Pollutant

Hg - Mercury hr - hour lbs - Pounds l - Liter

MACT - Maximum Achievable Control Technology

m - Meter mg - Milligram mm - Millimeter MM - Million

MOCS - Management of Change System

NAICS - North American Industry Classification System

NSR - New Source Review NO. - Nitrogen oxides

NSPS - New Source Performance Standards

PM - Particulate Matter

PM<sub>10</sub> - Particulate matter less than 10 microns

ppm - Parts per million

PSD - Prevention of Significant Deterioration

PMP - Preventive Maintenance Plan psia - Pounds per square inch absolute

RACT - Reasonably Available Control Technology

SIC - Standard Industrial Classification

SIP - State Implementation Plan

SO<sub>2</sub> - Sulfur dioxide

TAL - Threshold Ambient LimitTAP - Toxic Air Pollutant

tpy - Tons per year

VOC - Volatile Organic Compound UTM - Universal Transverse Mercator

#### Preamble

Title V of the Clean Air Act Amendments of 1990 required EPA to create an operating permit program for implementation by state or local air permitting authorities. The purposes of this program are (1) to require an affected company to assume full responsibility for demonstrating compliance with applicable regulations; (2) to capture all of the regulatory information pertaining to an affected company in a single document; and (3) to make permits more consistent with each other.

A company is subject to the Title V program if it meets any of several criteria related to the nature or amount of its emissions. The Title V operating permit specifies what the affected company is, how it may operate, what its applicable regulations are, how it will demonstrate compliance, and what is required if compliance is not achieved. In Jefferson County, Kentucky, the Air Pollution Control District (APCDJC) is responsible for issuing Title V permits to affected companies and enforcing local regulations and delegated federal and state regulations. EPA may enforce federal regulations but not "District Only Enforceable Regulations".

Title V offers the public an opportunity to review and comment on a company's draft permit. It is intended to help the public understand the company's compliance responsibility under the Clean Air Act. Additionally, the Title V process provides a mechanism to incorporate new applicable requirements. Such requirements are available to the public for review and comment before they are adopted.

Title V Permit general conditions define requirements which are generally applicable to all Title V companies under the jurisdiction of APCDJC. This avoids repeating these requirements in every section of the company's Title V permit. Company-specific conditions augment the general conditions as necessary; these appear in the sections of the permit addressing individual emission units or emission points.

The general conditions include references to regulatory requirements that may not currently apply to the company, but which provide guidance for potential changes at the company or in the regulations during the life of the permit. Such requirements may become applicable if the company makes certain modifications or a new applicable requirement is adopted.

When the applicability of a section or subpart of a regulation is unclear, a clarifying citation will be made in the company's Title V permit at the emission unit/point level. Comments may also be added at the emission unit/point level to give further clarification or explanation.

The source's Title V permit may include a list of "insignificant activities," which are activities or processes falling into the general categories defined in Regulation 2.02, Section 2, and not associated with a specific operation or process for which there is a specific regulation. Activities so identified may be insignificant with regard to application disclosure requirements but may still have generally applicable requirements that continue to apply and must be included in the Title V operating permit. No periodic monitoring shall be required for facilities designated as insignificant activities.

#### **General Conditions**

- 1. <u>Compliance</u> The owner or operator shall comply with all applicable requirements and with all terms and conditions of this permit. Any noncompliance shall constitute a violation of the Act, State and District regulations and shall cause the source to be subject to enforcement actions including, but not limited to, the termination, revocation and reissuance, or revision of this permit, or denial of a permit application to renew this permit. Notwithstanding any other provision in the Jefferson County portion of the Kentucky SIP approved by EPA, any credible evidence may be used for the purpose of establishing whether the owner or operator is in compliance with, has violated, or is in violation of any such plan. (Regulation 2.16, sections 4.1.3, 4.1.13.1 and 4.1.13.7)
- 2. <u>Compliance Certification</u> The owner or operator shall certify, annually or more frequently if required in applicable regulations, compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. This certification shall meet the requirements of Regulation 2.16, sections 3.5.11 and 4.3.5. The owner or operator shall submit the annual compliance certification directly to the following address as well as to the District, as set forth in Regulation 2.16, section 4.3.5.4:

US EPA - Region IV Air Enforcement Branch Atlanta Federal Center 61 Forsyth Street Atlanta, GA 30303-8960

- 3. <u>Compliance Schedule</u> A compliance schedule must meet the requirements of Regulation 2.16, section 3.5.9.5. The owner or operator shall submit a schedule of compliance for each emission unit that is not in compliance with all applicable requirements. A schedule of compliance shall be supplemental to, and shall not condone noncompliance with, the applicable requirements on which it is based. For each schedule of compliance, the owner or operator shall submit certified progress reports at least semi-annually, or at a more frequent period if specified in an applicable requirement or by the District in accordance with Regulation 2.16 section 4.3.4. The progress reports shall contain:
  - a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when activities, milestones, or compliance were achieved.
  - b. An explanation of why dates in the schedule of compliance were not or will not be met, and preventive or corrective measures adopted.
- 4. **Duty to Supplement or Correct Application** If the owner or operator fails to submit relevant facts or has submitted incorrect information in the permit application, it shall, upon discovery of the occurrence, promptly submit the supplementary facts or corrected information in accordance with Regulation 2.16, section 3.4.

#### 5. **Emergency Provision**

- a. An emergency shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emission limitations. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - I. An emergency occurred and that the owner or operator can identify the cause of the emergency.
  - ii. The permitted facility was at the time being properly operated.
  - During the period of the emergency the owner or operator expeditiously took all reasonable steps, consistent with safe operating practices, to minimize levels of emissions that exceeded the emission standards or other requirements in this permit.
  - iv. The owner or operator submitted notice meeting the requirements of Regulation 1.07 of the time when emissions limitations were exceeded because of the emergency. This notice must fulfill the requirement of this condition, and must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
- b. In an enforcement proceeding, the owner or operator seeking to establish the occurrence of an emergency has the burden of proof.
- c. This condition is in addition to any emergency or upset provision contained in an applicable requirement.

(Regulation 2.16, sections 4.7.1 through 4.7.4)

- 6. <u>Emission Fees Payment Requirements</u> The owner or operator shall pay annual emission fees in accordance with Regulation 2.08. Failure to pay the emissions fees when due shall constitute a violation of District Regulations. Such failure is subject to penalties and an increase in the fee of an additional 5% per month up to a maximum of 25% of the original amount due. In addition, failure to pay emissions fees within 60 days of the due date shall automatically suspend this permit to operate until the fee is paid or a schedule for payment acceptable to the District has been established. (Regulation 2.08, section 1.3)
- 7. **Emission Offset Requirements** The owner or operator shall comply with the requirements of Regulation 2.04.
- 8. **Enforceability Requirements** Except for the conditions that are specifically designated as "District Only Enforceable Conditions", all terms and conditions of this permit, including any provisions designed to limit a source's potential to emit, are enforceable by EPA and citizens as specified under the Act. (Regulation 2.16, sections 4.2.1 and 4.2.2)

#### 9. **Enforcement Action Defense**

- a. It shall not be a defense for the owner or operator in an enforcement action that it would have been necessary for the owner or operator to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- b. The owner or operator's failure to halt or reduce activity may be a mitigating factor in assessing penalties for noncompliance if the health, safety or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operation.

(Regulation 2.16, sections 4.1.13.2 and 4.1.13.3)

- 10. <u>Hazardous Air Pollutants and Sources Categories</u> The owner or operator shall comply with the applicable requirements of Regulations 5.02 and 5.14.
- 11. <u>Information Requests</u> The owner or operator shall furnish to the District, within a reasonable time, information requested in writing by the District, to determine whether cause exists for revising, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The owner or operator shall also furnish, upon request, copies of records required to be kept by this permit. (Regulation 2.16, section 4.1.13.6) If information is submitted to the District under a claim of confidentiality, the source shall submit a copy of the confidential information directly to EPA. (Regulation 2.07, section 10.2)
- 12. <u>Insignificant Activities</u> The owner or operator shall notify the District in a timely manner of any proposed change to an insignificant activity that would require a permit revision. (Regulation 2.16, section 5)
- 13. <u>Inspection and Entry</u> Upon presentation of credentials and other documents as required by law, the owner or operator shall allow the District or an authorized representative to perform the following during reasonable hours:
  - a. Enter the premises to inspect any emissions-related activity or records required in this permit.
  - b. Have access to and copy records required by this permit.
  - c. Inspect facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required by this permit.
  - d. Sample or monitor substances or parameters to assure compliance with this permit or any applicable requirements.

(Regulation 2.16, section 4.3.2)

14. <u>Monitoring and Related Record keeping and Reporting Requirements</u> - The owner or operator shall comply with the requirements of Regulation 2.16, section 4.1.9. The owner

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or operator shall submit all required monitoring reports at least once every six months, unless more frequent reporting is required by an applicable requirement. The reporting period shall be January 1st through June 30th and July 1st through December 31st of each calendar year. All reports shall be postmarked by the 60th day following the end of each reporting period. If surrogate operating parameters are monitored and recorded in lieu of emission monitoring, then an exceedance of multiple parameters may be deemed a single violation by the District for enforcement purposes.

- 15. **Off-permit Documents** Any applicable requirements, including emission limitations, control technology requirements, or work practice standards, contained in an off-permit document cannot be changed without undergoing the permit revision procedures in Regulation 2.16, Section 5. (Regulation 2.16, section 4.1.5)
- 16. **Operational Flexibility** The owner or operator may make changes without permit revision in accordance with Regulation 2.16, section 5.8.
- 17. **Permit Amendments (Administrative)** This permit can be administratively amended by the District in accordance with Regulation 2.16, sections 2.3 and 5.4.
- 18. **Permit Application Submittal** The owner or operator shall submit a timely and complete application for permit renewal or significant revision. If the owner or operator submits a timely and complete application then the owner or operator's failure to have a permit is not a violation until the District takes formal action on this permit application. This protection shall cease to apply if, subsequent to completeness determination, the owner or operator fails to submit, by the deadline specified in writing by the District, additional information required to process the application as required by Regulation 2.16, sections 3 and 5.2.
- 19. **Permit Duration** This permit is issued for a fixed term of 5 years, in accordance with Regulation 2.16, section 4.1.8.3.
- 20. **Permit Renewal, Expiration and Application** Permit renewal, expiration and application procedural requirements shall be in accordance with Regulation 2.16, sections 4.1.8.2 and 5.3. This permit may only be renewed in accordance with section 5.3.
- 21. **Permit Revisions** No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in the permit. (Regulation 2.16, section 4.1.16)
- 22. **Permit Revision Procedures (Minor)** Except as provided in 40 CFR Part 72, the Acid Rain Program, this permit may be revised in accordance with Regulation 2.16, section 5.5.
- 23. <u>Permit Revision Procedures (Significant)</u> A source seeking to make a significant permit revision shall meet all the Title V requirements for permit applications, issuance and renewal, in accordance with Regulation 2.16, section 5.7, and all other applicable District Regulations.
- 24. **Permit Revocation and Termination by the District** The District may terminate this

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permit only upon written request of the owner or operator. The District may revoke a permit for cause, in accordance with Regulation 2.16, section 5.11.1.1 through 5.11.1.5. For purposes of Section 5, substantial or unresolved noncompliance includes, but is not limited to:

- a. Knowingly operating process or air pollution control equipment in a manner not allowed by an applicable requirement or that results in excess emissions of a regulated air pollutant that would endanger the public or the environment.
- b. Failure or neglect to furnish information, analyses, plans, or specifications required by the District.
- c. Knowingly making any false statement in any permit application.
- d. Noncompliance with Regulation 1.07, section 4.2; or
- e. Noncompliance with KRS Chapter 77.
- 25. **Permit Shield** The permit shield shall apply in accordance with Regulation 2.16, section 4.6.1.
- 26. **Prevention of Significant Deterioration of Air Quality** The owner or operator shall comply with the requirements of Regulation 2.05.
- 27. **Property Rights** This permit shall not convey property rights of any sort or grant exclusive privileges in accordance with Regulation 2.16, section 4.1.13.5.
- 28. <u>Public Participation</u> Except for modifications qualifying for administrative permit amendments or minor permit revision procedures, all permit proceedings shall meet the requirements of Regulations 2.07, Section 1; and 2.16, sections 5.1.1.2 and 5.5.4.
- 29. **Reopening For Cause** This permit shall be reopened and revised by the District in accordance with Regulation 2.16 section 5.9.
- 30. **Reopening for Cause by EPA** This permit may be revised, revoked and reissued or terminated for cause by EPA in accordance with Regulation 2.16 section 5.10.
- 31. **Risk Management Plan (112(r))** For each process subject to Section 112(r) of the Act, the owner or operator shall comply with 40 CFR Part 68 and Regulation 5.15.
- 32. <u>Severability Clause</u> The conditions of this permit are severable. Therefore, if any condition of this permit, or the application of any condition of this permit to any specific circumstance, is determined to be invalid, the application of the condition in question to other circumstances, as well as the remainder of this permit's conditions, shall not be affected. (Regulation 2.16, section 4.1.12)
- 33. Stack Height Considerations The owner or operator shall comply with the requirements

of Regulation 2.10.

34. <u>Startups, Shutdowns, and Malfunctions Requirements</u> - The owner or operator shall comply with the requirements of Regulation 1.07.

#### 35. Submittal of Reports, Data, Notifications, and Applications

a. Applications, reports, test data, monitoring data, compliance certifications, and any other document required by this permit as set forth in Regulation 2.16 sections 3.1, 3.4, 3.5, 4.1.13.6, 5.8.5 and 5.11.7 shall be submitted to:

Air Pollution Control District of Jefferson County 850 Barret Ave Louisville, KY 40204-1745

b. Documents which are specifically required to be submitted to EPA as set forth in Regulation 2.16 sections 3.3, and 5.8.5 shall be mailed to EPA at the following address:

US EPA - Region IV APTMD - 12th floor Atlanta Federal Center 61 Forsyth Street Atlanta, GA 30303-3104

36. Other Applicable Regulations - The owner or operator shall comply with all applicable requirements of the following regulations:

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	
1.01	General Application of Regulations and Standards	
1.02	Definitions	
1.03	Abbreviations and Acronyms	
1.04	Performance Tests	
1.05	Compliance with Emission Standards and Maintenance Requirements	
1.06	Source Self-Monitoring and Reporting	
1.07	Emissions During Startups, Shutdowns, Malfunctions, and Emergencies	
1.08	Administrative Procedures	
1.09	Prohibition of Air Pollution	
1.10	Circumvention	
1.11	Control of Open Burning	
1.14	Control of Fugitive Particulate Emissions	

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Regulation Title	
2.01	General Application	
2.02	Air Pollution Regulation Requirements and Exemptions	
2.03	Permit Requirements - Non-Title V Construction and Operating Permits and Demolition/Renovation Permits	
2.07	Public Notification for Title V, PSD, and Offset Permits; SIP Revisions; and Use of Emission Reduction Credits	
2.09	Causes for Permit Suspension	
2.10	Stack Height Considerations	
2.11	Air Quality Model Usage	
2.16	Title V Operating Permits	
4.01	General Provisions for Emergency Episodes	
4.02	Episode Criteria	
4.03	General Abatement Requirements	
4.07	Episode Reporting Requirements	
5.01	General Provisions (for Hazardous Air Pollutants)	
5.03	Potential Hazardous Emissions	
6.01	General Provisions (for Existing Affected Facilities)	
6.02	Emission Monitoring for Existing Sources	
7.01	General Provisions (for New Affected Facilities)	

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation Title		
1.12	Control of Nuisances	
1.13	Control of Objectionable Odors in the Ambient Air	
2.08	Emissions Fees, Permit Fees, Permit Renewal Procedures, and Additional Program Fees	
8.03	Commuter Vehicle Testing Requirements	

Emission Unit No.	<b>Emission Unit Description</b>	
U-1	6 Aluminum Rolling Mills (#13, #4, #14, #15, #11, & #12)	
U-2	14 Annealing Ovens (#9 to #22)	
U-3	1 Doubler	

# **Applicable Regulations:**

Federally Enforceable Regulations		
Regulation	Title	Applicable Sections
1.05	Compliance with Emission Standards and 1, 4.1, 4.1.2, 4.1.2.1, and Maintenance Requirements	
1.18	Rule Effectiveness	1, 2, and 3
2.04	Construction or Modification of Major Sources In or Impacting Upon Non-Attainment Areas (Emission Offset Requirements)	
6.24	Standard of Performance for Existing Sources Using 1.1, 1.1.1, 1.1.3, 1.2, 2, 3.3 Organic Materials 4.2, 5, and 7	
6.43	Volatile Organic Compound Emission Reduction 1, 2, 3, 4, and 6 Requirements	
7.25	Standard of Performance for New Sources Using 1.1, 1.3, 1.4, 2, 3.1, 4. Volatile Organic Compounds and 5	

District Only Enforceable Regulations		
Regulation	Title	Applicable Sections
5.11	Standards of Performance for Existing Sources Emitting Toxic Air Pollutants	1, 2, 3, 5, and 6
5.12	Standards of Performance for New or Modified Sources Emitting Toxic Air Pollutants	1, 2, 3, 4, and 5
5.14	Hazardous Air Pollutants and Source Categories	1, 2, 3, and 4

# **Allowable Emissions:**

Emission Pt.	Regulated Air Pollutant	Applicable Regulation	Standard/ Limit
E-1	VOC	7.25	126.9 tons/yr. See Additional Conditions 1.a.iii & 1.a.iv
	TAPs	5.11	See Additional Condition 1.b.i
E-2, E-3, E-4, E-5 & E-6	VOC	6.24	1350 lbs/hr combined. 9000 lbs/day combined. See Additional Conditions 1.a.iii & 1.a.v
	TAPs	5.11	See Additional Condition 1.b.i
E-9, E-10, E-11, E- 12, E-13, E-14, E-15, E-16, E-17 & E-18	VOC	6.24	1350 lbs/hr combined. 9000 lbs/day combined. See Additional Condition 1.a.vi
	TAPs	5.11	See Additional Condition 1.b.i.
E-19, E-20, E-21, & E-22	VOC	7.25	5.0 tons/yr. See Additional Condition 1.a.vii
	TAPs	5.12	See Additional Condition 1.b.i
E-23	VOC	7.25	7.3 tons/yr. See Additional Condition 1.a.viii
	TAPs	5.12	See Additional Condition 1.b.i

Note: There is a plant-wide allowable VOC emission limit of 616.85 tons per year. See Additional Condition #1.a.ix.

Processes associated with the Rolling Mills which have minimal emissions		
4 Plate Filters and 1 Bag Filter, using diatomaceous earth, for cleaning the rolling coolant.		
4 Separators, for transferring doubled sheets of aluminum foil from one coil to two separate coils, for spooling single sheet product for shipment, and for spooling scrap aluminum.	Note #1: No rolling coolant is added at any of these processes. Any VOC emissions are due to residual oil carryover from earlier processes.	
1 Process Scrap Conveying System, consisting of 2 cyclones and ductwork for conveying scrap trim from the 4 separators, the doubler, the Pot Room floor, and the 14 annealing ovens to the Pot Room.	Note #2: The 2 scrap conveying cyclones are process equipment. The potential PM emissions from the process are less than 1 ton per year and are less than the allowable PM emissions specified by Regulation 6.09.	

# **Components:**

Emission Pt.	Process
E-1	Rolling Mill #13
E-2, E-3, E-4, E-5 & E-6	Rolling Mills #4, #14, #15, #11 & #12 respectively
E-9, E-10, E-11, E-12, E-13, E-14, E-15, E-16, E-17 & E- 18	Ovens #9, #10, #11, #12, #13, #14, #15, #16, #17, & #18 respectively
E-19, E-20, E-21, & E-22	Ovens #19, #20, #21, & #22 respectively
E-23	Doubler

#### **Control Devices:**

Emission Pt.	Control ID	Control Type
E-1	C-1	Oil Mist Collector
E-2	C-2	Oil Mist Collector
E-3	C-3	Oil Mist Collector
E-4	C-4	Oil Mist Collector
E-5	C-5	Oil Mist Collector
E-6	C-6	Oil Mist Collector
E-23	C-7	Oil Mist Collector

There are no control devices on the 14 annealing ovens.

#### **Additional Conditions**

1. **Standards** (Regulation 2.16, section 4.1.1)

## a. **VOC**

- I. The owner or operator shall use a saturated hydrocarbon-based rolling coolant, meeting the following specification, in all rolling and doubling processes: 98 % minimum linear paraffins with a minimum carbon chain length of  $C_{12}$ . (Regulation 6.43, section 6.1)
- ii. The owner or operator shall receive written approval by the District prior to the use of alternate rolling coolants not meeting the specifications in Additional Condition #1.a.i, above. Approval shall be conditioned upon a demonstration that the use of an alternate rolling coolant will result in VOC

- emissions no greater than a rolling coolant meeting these specifications. (Regulation 6.43, section 6.2)
- iii. The owner or operator shall include fugitive emissions, which are not captured by the exhaust hoods, when determining VOC emissions. When determining the emissions from the rolling mills, it is also necessary to include the emissions from the rolling coolant filters and to include the emissions from operations after the rolling mills, such as the separators and the process scrap conveying system. (Regulation 6.24, section 1.1; Regulation 6.43, section 6.3; and Regulation 7.25, Section 1)
- iv. The owner or operator shall not allow the VOC emissions from Rolling Mill #13 to exceed 126.9 tons per calendar year. (See Comment #1.) (Regulation 7.25, section 3.1)
- v. The owner or operator shall not allow the combined VOC emissions from Rolling Mills #4, #14, #15, #11, and #12 to exceed one thousand three hundred and fifty (1350) pounds per hour or nine thousand (9000) pounds per day. (The allowable VOC emissions are based on compliance with section 3.3 of Regulation 6.24, for Class III Solvents, using the equipment groupings from the operating permits prior to the Title V permit.) (Regulation 6.24, section 3.3)
- vi. The owner or operator shall not allow the combined VOC emissions from Annealing Ovens #9, #10, #11, #12, #13, #14, #15, #16, #17, and #18 to exceed one thousand three hundred and fifty (1350) pounds per hour or nine thousand (9000) pounds per day. (The allowable VOC emissions are based on compliance with section 3.3 of Regulation 6.24 for Class III Solvents using the equipment groupings from the operating permits prior to the Title V permit. The potential emissions from these ovens are less than the allowable VOC emission limits. See Comment #4.) (Regulation 6.24, section 3.3)
- vii. The owner or operator shall not emit greater than five (5) tons per year of VOC emissions from Annealing Ovens #19, #20, #21, and #22. (Regulation 7.25, section 2.1)
- viii. The owner or operator shall utilize Best Available Control Technology on the Doubler. Based on a BACT review submitted on 20 October 1999, the company shall not emit greater than 7.3 tons of VOC per year from the Doubler (This emissions limit is based on the emissions from the Doubler stack and from the fugitive emissions at the Doubler when the matte oil (rolling coolant) is being applied. The matte oil which is added to the aluminum sheet is not included in the emissions limit.) (See Comment No. 3 for additional information.) (Regulation 7.25, section 3.1)
- ix. The owner or operator shall not allow the total VOC emissions to exceed 616.85 tons per calendar year based on the rolling coolant usage for all activities throughout the entire plant. (See Comment #1 for an explanation of

this emission limit.) (Regulation 2.04, Section 1)

## b. **TAPs** (Regulations 5.11 and 5.12)

- I. The owner or operator shall evaluate and document process changes to demonstrate that the emission levels established during the previous compliance demonstration are not exceeded. TAPs not included in the previous compliance demonstration shall also be reviewed. If there is an increase in TAP emission levels (such as, from changing to a new rolling coolant), the owner or operator shall demonstrate, that for the facilities covered by Regulation 5.11, Standards of Performance for Existing Sources Emitting Toxic Air Pollutants, that emissions of any pollutant referenced by Regulation 5.11 will be less than the adjusted significant level (ASL), based on potential to emit (PTE) and that the net increase (the result of algebraic summation of increases and decreases) in emission rate of any pollutant referenced by Regulation 5.12, Standards of Performance for New or Modified Sources Emitting Toxic Air Pollutants, will not exceed the ASL regardless of whether the pollutant of concern was or was not previously emitted. The decreases will be based on representative actual emissions and the increases will be based on PTE. If there is an increase in TAP emission levels, the owner or operator shall demonstrate, that for the facilities covered by Regulation 5.12, that emissions of any pollutant referenced by Regulation 5.12 will be less than the adjusted significant level (ASL), based on potential to emit (PTE).
- ii. The owner or operator shall continue to comply with Regulations 5.11 and 5.12, except for those specific pollutants governed by a MACT standard that is or becomes applicable to this source or pollutant.
- iii. The owner or operator shall not be precluded from requesting that Additional Condition #1.b.i be replaced with another District-approved method of compliance demonstration more suitable to their particular facility and mode of operation.

# 2. **Monitoring** (Regulation 2.16, section 4.1.9.1.2)

#### a. **VOC**

- I. The owner or operator shall calculate the following VOC emissions as specified in Additional Condition #3.a below:
  - 1) Monthly and annual emissions for Rolling Mill #13 (See Comment #1.):
  - 2) Combined hourly average and combined daily average emissions for Rolling Mills #4, #14, #15, #11 & #12;
  - 3) Combined monthly and annual emissions for Ovens #19, #20, #21, & #22;

- 4) Monthly and annual emissions for the doubler; and
- 5) Monthly and annual emissions based on the rolling coolant usage for all activities throughout the entire plant.
  (Regulation 6.24, section 5.2; Regulation 7.25, section 4.2; and Regulation 1.05, Section 4)
- ii. The company will not be required to calculate the combined hourly average and combined daily average emissions for Ovens #9, #10, #11, #12, #13, #14, #15, #16, #17, & #18 since the potential emissions are less than the allowable emissions. (See Additional Condition #3.a.iii.4 and Comment #4 below for further details.)
- iii. The owner or operator shall comply with the following District-approved preventive maintenance program (PMP):

Equipment	Preventive Maintenance Required
Mills 13 & 14, Oil Mist Collector filters	Inspect monthly and replace as needed
Mills 4, 11, 12, & 15, Oil Mist Collectors	Inspect drains monthly
Doubler, Oil Mist Collector	Inspect drains monthly
All Mills, Ventilation Fans	Inspect fans monthly
Doubler, Ventilation Fan	Inspect fan monthly

b. **TAPs** (Regulations 5.11 and 5.12)

The owner or operator shall demonstrate compliance with Regulation 5.11, Standards of Performance for Existing Sources Emitting Toxic Air Pollutants and Regulation 5.12, Standards of Performance for New or Modified Sources Emitting Toxic Air Pollutants, by complying with Conditions (I) through (iv), below. These conditions are surrogates for hourly emissions records and will monitor ongoing compliance. (See Comment #5.)

The owner or operator shall:

- I. Neither be required to maintain records of nor report TAP emissions.
- ii. Evaluate and document process changes to demonstrate that the emission levels established during the previous compliance demonstration are not exceeded; and make these records available to the District upon request. TAPs not included in the previous compliance demonstration shall also be reviewed. If there is an increase in TAP emission levels (such as, from changing to a new rolling coolant), the owner or operator shall demonstrate,

that for the facilities covered by Regulation 5.11, that emissions of any pollutant referenced by Regulation 5.11 will be less than the adjusted significant level (ASL), based on potential to emit (PTE) and that the net increase (the result of algebraic summation of increases and decreases) in emission rate of any pollutant referenced by Regulation 5.12 will not exceed the ASL regardless of whether the pollutant of concern was or was not previously emitted. The decreases will be based on representative actual emissions and the increases will be based on PTE. If there is an increase in TAP emission levels, the owner or operator shall demonstrate, that for the facilities covered by Regulation 5.12, that emissions of any pollutant referenced by Regulation 5.12 will be less than the adjusted significant level (ASL), based on potential to emit (PTE).

- iii. Continue to comply with District Regulations 5.11 and 5.12, except for those specific pollutants governed by a MACT standard that is or becomes applicable to this source or pollutant.
- iv. Not be precluded from requesting that Additional Conditions #2.b.i and #2.b.ii be replaced with another District-approved method of compliance demonstration more suitable to their particular facility and mode of operation.
- 3. **Record Keeping** (Regulation 2.16, section 4.1.9.2)

#### a. **VOC**

- I. The owner or operator shall maintain the following records for plant-wide VOC emissions associated with the rolling coolant: (Regulation 6.43, section 6.3)
  - 1) Number of working days per month;
  - 2) Pounds of rolling coolant used per month;
  - 3) Pounds of rolling coolant purchased per month;
  - 4) Pounds of rolling coolant reclaimed each month;
  - 5) Total monthly VOC emissions;
  - 6) Daily average VOC emissions calculated from the monthly data; and
  - 7) The chemical composition of each rolling coolant used to show compliance with Additional Condition #1.a.i, above.
- ii. The owner or operator shall keep records as required by the District to demonstrate compliance with the emission limits specified in the Title V permit. The hourly average VOC emissions for Rolling Mills #4, #14, #15, #11, and #12 combined and for Annealing Ovens #9, #10, #11, #12, #13, #14, #15, #16, #17, and #18 combined shall be based on the daily average VOC emissions. For simplifying the calculation of VOC emissions to demonstrate compliance for Rolling Mills #13, #4, #14, #15, #11, and #12, the company may assume that all the VOC emissions from the coolant are emitted from the rolling mills. Otherwise, each month the company shall calculate the VOC emissions from the annealing ovens and from the melting pots by using

emission factors which have been approved by the District. The company may also calculate the amount of residual oil that is shipped out on products and retained in the filter media each month and the amount of residual oil on the scrap that is combusted in the Melting Pots. (The currently approved emission factors are as follows: Annealing Ovens - 1.1 pounds VOC per 2000 pounds of aluminum annealed [based on gravimetric analysis data submitted by the company on 8 March 2000]; Melting Pots - 1.65 pounds VOC per 2000 pounds of aluminum melted; and Shipped on Products and Retained in the Filter Media - 0.0017 pounds VOC per pound of aluminum produced [see Comment #6]. An emission factor has not yet been approved for the amount of residual oil combusted in the Melting Pots, for the purpose of reducing the overall emissions. If a more accurate method of determining emissions or if more accurate emission factors are established, the District will change the record keeping requirements accordingly.) These emissions and the emissions from the Doubler and from the usage of rolling coolant in the cold solvent metal cleaners may be subtracted from the rolling mill emissions. (Regulation 6.24, section 5.2; Regulation 7.25, section 4.2; and Regulation 1.05, Section 4)

- iii. The owner or operator shall comply with the following requirements pursuant to Section 4 of Regulation 1.05:
  - 1) The following table summarizes the record keeping system which takes into consideration coolant additions to each mill, to the Doubler, and to the cold solvent metal cleaners, coolant reclaimed from each mill, from the Doubler, and from the cold solvent metal cleaners, and coolant reclaimed from the combined oil mist collectors and basement sumps. Pump Meter #2 is used to measure the quantity of coolant pumped from the mill system and from the oil mist collectors and basement sumps for reclaim. A Coolant Reclaim Log is maintained by the company. In addition to Meter #2 readings, entries are made in this log for measured quantities of coolant which are reclaimed from the Doubler and the cold solvent metal cleaners, but which do not pass through Meter #2. Next the reclaimed coolant is transferred to Tank #6. At Tank #6, rainwater that has entered the system from the oil mist collectors is periodically removed and the quantity of water is measured and recorded. Next, the dirty reclaimed coolant is filtered, and is transferred to Tank #7. Following Tank #7, Pump Meter #3 shows the total quantity of coolant pumped to Tank #3 for processing in the Vacuum Distillation Unit. The coolant reclaimed from the oil mist collectors and basement sumps is allocated to each mill based on the percent of coolant used by each mill.

VOC Emissions Record keeping System for the Rolling Coolant					
Coolant Additions	Source of Data	Coolant Reclaimed	Source of Data		
Normal daily coolant additions to each mill	Daily Coolant Log	Coolant dumped from mill during a coolant change	Coolant Reclaim Log and Pump Meter #2		
Coolant replacement from a coolant change	Daily Coolant Coolant flushed through mill during a coolant change		Coolant Reclaim Log and Pump Meter #2		
Coolant used to flush mill during a coolant change	Daily Coolant  Log  from oil mist  collectors and basement sumps		Coolant Reclaim Log and Pump Meters #2		
Total matte oil supplied to the Doubler *	Monthly meter reading at Doubler Coolant Tank	Matte oil reclaimed at the Doubler *	Coolant Reclaim Log		
Coolant used in the metal cleaners**	Daily Coolant Log	Coolant reclaimed from the metal cleaners**	Coolant Reclaim Log		

\*When calculating the VOC emissions from the rolling mills, (rather than when calculating the plant wide emissions from the rolling coolant), the "Reclaim" will be "zero" and the "Addition" will be "Matte oil which is actually added to the aluminum sheet at the Doubler". This value does not include the matte oil which is emitted or reclaimed at the Doubler. The "Matte Oil which is actually added to the aluminum sheet at the Doubler" will be evenly distributed to each finish mill (Mills #4, #11, #12, #14, and #15). (Matte oil is not allocated to the breakdown mill (Mill #13) since this mill is used prior to the doubling process.)

\*\*When calculating the VOC emissions from the rolling mills, (rather than when calculating the plant wide emissions from the rolling coolant), the "Addition" and the "Reclaim" will be "zero".

2) The company shall maintain operating logs, approved by the District, which show the following information for each mill on a daily basis: normal daily coolant additions to mill, coolant added during a coolant change, coolant added to flush mill during a coolant change, and coolant reclaimed from mill during a coolant change / flush. Additives which are added to the rolling coolant will also be listed so that they can be properly accounted for. Records shall be kept of the amount of coolant reclaimed from the oil mist collectors and basement sumps.

Monthly Meter #3 readings shall be kept showing the volume of rolling coolant pumped from Tank #7 to Tank #3 for processing in the Vacuum Distillation Unit. (To accommodate an alternative procedure for calculating plant-wide coolant emissions, the company has the option to keep monthly records showing the change in volume in Tanks #3, #6 and #7.) Monthly records shall also be kept of the total matte oil supplied to the Doubler, the amount of matte oil reclaimed at the Doubler, and the calculated amount of matte oil added to the aluminum sheet processed through the Doubler. Monthly records shall be kept of the amount of still bottoms collected by the Vacuum Distillation Unit so that the reclaimed quantity for the rolling mills can be properly adjusted. (The still bottoms will contain a mixture of rolling coolant materials and contaminants such as hydraulic oil.) Records shall be kept of the amount of water which is removed from Tank #6 each month so that the emissions can be properly calculated. The amount of each addition of rolling coolant to the mills shall be recorded on an operating log at the time of the addition. When a coolant change / flush is performed, the amount of rolling coolant reclaimed from the mill shall be recorded on an operating log. The operating logs shall be available for inspection by the District. Due to the nature in which coolant is changed, daily emission values can not be accurately calculated. Some days appear to have negative emission values. Due to this problem, the company shall gather data for each day of the month, calculate the monthly VOC emissions, and use daily average values to demonstrate compliance with the daily and hourly VOC emission limits specified in this permit. The plant wide emissions from the usage of rolling coolant, the emissions from each individual mill, and the emissions from the Doubler shall be calculated using a material balance as specified in this permit. (If there are days, where there is no production for the applicable processes, these days shall be excluded when calculating average daily emissions.)

- 3) On the first day of each month at the beginning of the first shift, a meter reading for the Doubler Coolant Tank shall be taken and the value shall be entered in a log so that coolant usage can be calculated on a monthly basis.
- 4) The owner or operator shall keep the calculations in their records showing that the potential emissions from Annealing Ovens #9, #10, #11, #12, #13, #14, #15, #16, #17, and #18 can not exceed the allowable VOC emission limits. No additional compliance record keeping will be required for these ovens. (See Comment #4.) (Regulation 1.05, Section 4 and Regulation 6.24, section 5.2)
- iv. The owner or operator shall use the following equations for calculating the monthly mill emissions, the average daily mill emissions, and the average hourly mill emissions:

- **Am** = Additions to an individual mill = 3 gallons coolant and additives added to mill tank during the month (Coolant Addition Log)
- **M** = Matte oil (coolant) applied to the aluminum at the doubler; calculated using production data and application rate
- **W** = Rainwater that collects in basement sumps from oil mist collectors; is removed at Tank #6 (Coolant Reclaim Log). This quantity will be removed from the amount of coolant collected from the oil mist collectors.
- **Rm** = Removals from an individual mill = 3 gallons oil removed from the mill (Coolant Reclaim Log)
- **Rs** = Oil reclaimed from sumps & oil mist collectors = Gallons collected from sumps W
- **D** = Distribution factor = (additions to an individual mill removals from an individual mill) / (total additions to all mills total removals from all mills)
- **Sbt** = Total gallons of still bottoms generated
- **Sbc** = Gallons of contaminants in still bottoms (not coolant or additives) = Sbt \* % of contaminants
- Sb =Gallons of still bottoms generated that is coolant and additive (Coolant Reclaim Log / Meter 2) = Sbt Sbc
- C = Correction factor to account for contaminants in the coolant removed from the mills, such as hydraulic oil, which must be deducted from the reclaimed value to determine the proper amount of rolling coolant which is reclaimed = {gallons through Meter 3 (Sbc)} / (gallons through Meter 3)
- **d** = Average density of the rolling coolant and the coolant additives mixture (this value will be updated, as required by the District, when there is a change in materials used causing a negative impact on the accuracy of the calculations).

Monthly Emissions (Breakdown Mill) = [(Am - Rm\*C) - (Rs \*C\*D)] \* (d)

Monthly Emissions (Individual Intermediate Mills) = [(Am - Rm\*C) + (M/5) - (Rs\*C\*D)]\*(d)

Average Daily Mill Emissions (Individual Mill) = Monthly Emissions /

Operating Days

Average Hourly Mill Emissions (Individual Mill) = Daily Emissions / 24

Totals for groups of mills will be added together to show compliance in accordance with the permit.

- v. The owner or operator shall use the following equations for calculating the monthly plant-wide emissions and the annual plant-wide emissions that result from the usage of rolling coolant:
  - **Am** = 3 gallons coolant & additive added to mill tanks during the month (Coolant Addition Logs)
  - Ad = 3gallons matte oil (coolant) added to doubler tank during the month (Coolant Addition Logs)
  - Ac = 3 gallons coolant added to solvent cleaners during the month (Coolant Addition Logs)
  - At = 3 total gallons coolant & additive added to mill tanks, doubler and solvent cleaners during the month = Am + Ad + Ac
  - **W** = Gallons of rainwater that collects in basement sumps from oil mist collectors; is removed at Tank #6 (Coolant Reclaim Log). This quantity will be removed from the amount of coolant collected from the oil mist collectors.
  - **Rm** = 3 gallons coolant removed from the mills (Coolant Reclaim Log / Meter 2)
  - **Rd** = 3 gallons matte oil (coolant) reclaimed at the doubler (Coolant Reclaim Log)
  - **Rs** = Oil reclaimed from sumps & oil mist collectors = Gallons collected from sumps W
  - Rc = 3 gallons coolant removed from solvent cleaners (Coolant Reclaim Log)
  - $\mathbf{Rt} = \mathbf{3}$  gallons coolant removed from the mills, oil mist collectors, basement, doubler and solvent cleaners =  $\mathbf{Rm} + \mathbf{Rd} + \mathbf{Rs} + \mathbf{Rc}$
  - **Sbt** = Total gallons of still bottoms generated
  - **Sbc** = Gallons of contaminants in still bottoms (not coolant or additives) =

Sbt \* % of contaminants

- **Sb** = Gallons of still bottoms generated that is coolant and additive (Coolant Reclaim Log / Meter 2) = Sbt Sbc
- **d** = Average density of the rolling coolant and the coolant additives mixture (this value will be updated, as required by the District, when there is a change in materials used causing a negative impact on the accuracy of the calculations).
- **F** = Pounds of oil retained in the filter media (factor \* pounds of aluminum produced)

Monthly Plant-Wide Emissions = [At - (Rt - Sbc)] \* (d) - (F)

Annual Plant-Wide Emissions = 3 Monthly Plant-Wide Emissions

- vi. The owner or operator shall calculate and record the VOC emissions from Mill #13 for each calendar month. Compliance with the annual VOC limit shall be demonstrated for each calendar year. (Regulation 7.25, section 4.2)
- vii. The owner or operator shall keep records of the pounds of aluminum annealed each month in Annealing Ovens #19, #20, #21, and #22. The monthly and the 12-month rolling VOC emissions from the four ovens shall be calculated and recorded each calendar month. (Compliance with the annual VOC limit shall be demonstrated each month using emission data from the most recent twelve calendar months.) The company shall use an emission factor which has been approved by the District. (The currently approved emission factor is 1.1 pounds VOC per 2000 pounds of aluminum annealed.) (Regulation 7.25, section 4.2)
- viii. The owner or operator shall calculate and record the VOC emissions from the Doubler for each calendar month. Compliance with the annual VOC limit shall be demonstrated for each calendar year. To calculate the VOC emissions from the Doubler, the company shall determine the "Total Amount of Matte Oil (Rolling Coolant) Which Is Supplied to the Doubler" (A) (metered). From this amount, the company shall subtract the "Amount of Matte Oil Which Is Actually Added to the Aluminum Sheet" (B) (calculated using an application rate and production data) and the "Amount of Matte Oil Which Is Reclaimed at the Doubler" (R). VOC Emissions from the Doubler = A [B+R]. (Regulation 7.25, section 4.2)
- ix. The owner or operator shall calculate and record for each calendar month the VOC emissions based on the rolling coolant usage for all activities throughout the entire plant. Compliance with the annual VOC limit shall be demonstrated for each calendar year. (Regulation 7.25, section 4.2)

- x. The owner or operator shall keep the following records for the preventive maintenance program:
  - a) Date of each inspection performed;
  - b) Summary of the results of each inspection; and
  - c) Date and description of preventive maintenance and corrective actions performed on each collection system.

These records shall be made available to the District upon request.

## b. **TAPs** (Regulations 5.11 and 5.12)

- I. The owner or operator shall keep records of the compliance demonstration showing, that for the facilities covered by Regulation 5.11, Standards of Performance for Existing Sources Emitting Toxic Air Pollutants, that the emissions of any pollutant referenced by Regulation 5.11 will be less than the adjusted significant level (ASL), based on potential to emit (PTE). If there is an increase in TAP emission levels (such as, from changing to a new rolling coolant), the owner or operator shall also keep records, for each individual project, showing that the net increase (the result of algebraic summation of increases and decreases) in emission rate of any pollutant referenced by Regulation 5.12, Standards of Performance for New or Modified Sources Emitting Toxic Air Pollutants, will not exceed the ASL regardless of whether the pollutant of concern was or was not previously emitted. The decreases will be based on representative actual emissions and the increases will be based on PTE.
- ii. The owner or operator shall keep records of the compliance demonstration showing, that for the facilities covered by Regulation 5.12, that the emissions of any pollutant referenced by Regulation 5.12 will be less than the adjusted significant level (ASL), based on potential to emit (PTE).

#### 4. **Reporting** (Regulation 2.16, section 4.1.9.3)

#### a. **VOC**

- I. The owner or operator shall submit a compliance monitoring report every six months as required by Regulation 2.16, Section 4.1.9. One report shall cover the first six months of the calendar year and the following report shall cover the last six months of the calendar year. The following information shall be included in the report:
  - 1) For Rolling Mills #4, #14, #15, #11, & #12, the following information, at a minimum, shall be included for determining compliance with Regulation 6.24:
    - a) Emission Unit ID numbers and Emission Point ID numbers;

- b) The beginning and ending date of the reporting period;
- c) Identification of all periods of exceedances of the hourly and daily VOC emission limit including the quantity of excess emissions (If no exceedances occurred during the reporting period, this should be reported.); and
- d) Reason for excess emissions whether process upset, control device malfunction, other known causes, or unknown causes.
- 2) For Rolling Mill #13 and for the Doubler, the following information, at a minimum, shall be included for determining compliance with the annual VOC limits:
  - a) Emission Unit ID numbers and Emission Point ID numbers;
  - b) The beginning and ending date of the reporting period;
  - c) In the first report of the year, a listing of the monthly VOC emissions and a summation of the January 1st through June 30th VOC emissions;
  - d) In the second report of the year, a listing of the monthly VOC emissions and a summation of the January 1st through December 31st VOC emissions; and
- 3) For Annealing Ovens #19, #20, #21, & #22, the following information, at a minimum, shall be included for determining compliance with the annual VOC limits:
  - a) Emission Unit ID numbers and Emission Point ID numbers;
  - b) The beginning and ending date of the reporting period;
  - c) A listing of the monthly VOC emissions and a listing of the 12-month rolling VOC emissions which were calculated each calendar month; and
- 4) For VOC emissions based on the rolling coolant usage for all activities throughout the entire plant, the following information, at a minimum, shall be included for determining compliance with the annual VOC limit:
  - a) Statement that VOC emissions are based on the rolling coolant usage for all activities throughout the entire plant;
  - b) The beginning and ending date of the reporting period;
  - c) In the first report of the year, a listing of the monthly VOC emissions and a summation of the January 1st through June 30th VOC emissions;
  - d) In the second report of the year, a listing of the monthly VOC emissions and a summation of the January 1st through December 31st VOC emissions; and
- 5) For the preventive maintenance program (PMP), the following

information, at a minimum, shall be included for demonstrating compliance with the PMP:

- a) Emission Point ID number;
- b) The beginning and ending date of the reporting period; and
- c) A summary report which specifies whether the required inspections were performed and which summarizes the preventive maintenance performed and any corrective actions taken.
- ii. The owner or operator shall report information on the records which are kept in accordance with Condition #3.a.i. and Section 6 of Regulation 6.43, Volatile Organic Compound Emission Reduction Requirements, by following the requirements of Regulation 6.43, Section 4.
- iii. No compliance reporting shall be required for Annealing Ovens #9, #10, #11, #12, #13, #14, #15, #16, #17, and #18. (See Comment #4, below.)
- iv. The owner or operator shall notify the District prior to the use of new rolling oil additives if the company has any uncertainty that their use will comply with District Regulations or the requirements of this permit. (Regulation 5.12; Regulation 6.24, section 2.4; and Regulation 6.43, section 6.2)
- b. **TAPs** (Regulations 5.11 and 5.12)
  - I. If there have been process changes which would require the Toxic Air Pollutant emission levels to be reevaluated, the owner or operator shall include the following information along with the semi-annual VOC compliance monitoring report required above:
    - 1) Emission Unit ID numbers and Emission Point ID numbers of the affected equipment;
    - 2) The beginning and ending date of the reporting period;
    - 3) A description of the process changes;
    - 4) The date that the process changes were made; and
    - 5) A summary of the results of the review which was conducted to demonstrate compliance with the emission standards of this permit.
  - ii. The owner or operator shall notify the District prior to the use of new rolling oil additives if the company has any uncertainty that their use will comply with District Regulations or the requirements of this permit. (Regulation 5.12; Regulation 6.24, section 2.4; and Regulation 6.43, section 6.2)

## **Comments/Explanations**

#### 1. **Rolling Mill #13**

Permit No. 141-97-TV

In 1992, a construction permit was issued for Rolling Mill #13 allowing the company to make physical changes to the mill that would increase its speed. As a result of modifying Mill #13, there was a potential VOC emissions increase of 209.2 tons per year (comparing the allowable VOC emissions of 278.0 tons per year from a modified Mill #13 to the estimated actual emissions of 68.8 tons per year from Mill #13 prior to the modification). This increase of 209.2 tons per year included the other increases which could occur at the plant due to the elimination of a bottleneck, since the plant-wide VOC emissions were allowed to increase by a total of 209.2 tons per year from 591.35 tons per year (prior to the modification) to 800.55 tons per year (after the modification). The 591.35 tons per year figure was determined by the company when deciding how many of the emission reductions at the plant would be requested to be banked and how many would go unclaimed as a result of the switch in rolling oil from kerosene to a linear paraffin (Norpar 13) and the corresponding decrease in the plant-wide allowable emission rate. In addition to the increase in VOC emissions from modifying Mill #13, there was an estimated maximum increase of 9.3 tons per year as a result of installing Annealing Ovens #19, #20, #21, and #22, one (1) doubler, and various storage tanks during the contemporaneous period. This resulted in a total increase during the contemporaneous period of 218.5 tons per year. A total of 190 tons per year of VOC emission reduction credits were withdrawn from the Jefferson County Emissions Bank. Combining the VOC emission increases and decreases resulted in an overall emission increase of 28.5 tons per year, which was less than the significant amount specified in Regulation 2.04, Construction or Modification of Major Sources In or Impacting Upon Non-Attainment Areas (Emission Offset Requirements).

On 16 April 1997, the District received an application from the company to deposit additional emission reduction credits into the Bank. The company agreed to limit the VOC emissions from Rolling Mill #13 to 126.9 tons per year rather than 278.0 tons per year since the speed of the mill was not increased as much as originally planned. This resulted in a VOC emission reduction of 151.1 tons per year. The company also took credit for shutting down Rolling Mill #3. This resulted in a VOC emission reduction of 32.6 tons per year. These reductions resulted in the plant-wide allowable VOC emission limit being lowered by 183.7 tons per year (from 800.55 tons per year to 616.85 tons per year) when the banking permit was issued.

On 20 October 1999, the District received a BACT analysis for the Doubler. As a result of this analysis, the company is allowed to emit 7.3 tons per year of VOC emissions in the doubler area. This allowable emission rate is 3.0 tons larger than the value that was used to evaluate the estimated emission increases during the contemporaneous period when Mill #13 was modified. This will be acceptable, however, since a 11.5 ton per year safety factor was used in the original review. The company originally had an estimated net emissions increase of 28.5 tons per year compared to the significant value of 40 tons per year specified in Regulation 2.04, Construction or Modification of Major Sources In or Impacting Upon Non-Attainment Areas (Emission Offset Requirements). It was decided that only the VOC emissions in the Doubler area need to be considered when evaluating the emission increases caused by the Doubler since the company must apply the rolling coolant between the two

doubled sheets at the rolling mills if it is not applied at the Doubler.

#### 2. Annealing Ovens #19, #20, #21, and #22

In 1989 and 1991, the company installed Annealing Ovens #19, #20, #21, and #22. The combined VOC emissions from these four ovens is limited to five (5) tons per year, as specified in section 2.1 of Regulation 7.25.

#### 3. **Doubler**

The doubler was permitted in early 1987 and was subject to Regulation 7.24, Standards of Performance for New General Surface Coating Operations. At that time, Regulation 7.24 specified that the company could emit 15 percent by weight of the VOC input into the affected facility. Regulation 7.24 was repealed on 17 February 1988 and was superseded by Regulation 7.25. In late 1998, the company installed a flow meter to accurately monitor the amount of rolling coolant which is used in this process. It was discovered that a greater quantity of rolling coolant is used on the doubler (about 25 gallons per day) than originally approximated (5 gallons per day). The company had been using the VOC standard specified in section 3.2 of Regulation 7.25 to show compliance. After discovering the larger rolling coolant usage, the company did a material balance review of the Doubler process to estimate the VOC emissions. It was estimated that more than 5 tons per year of VOC could be emitted from the stack. There are also fugitive emissions at the Doubler when the rolling coolant is being applied and there are fugitive emissions from the rolling coolant added to the sheet, after it is applied. The company decided to perform a Best Available Control Technology (BACT) analysis and demonstrate compliance by utilizing BACT on the Doubler, as specified in section 3.1 of Regulation 7.25. On 20 October 1999, the District received the BACT analysis and determined that it would not be cost effective to replace the current exhaust system and oil mist collector. A large quantity of oil is collected in the current exhaust system due to settling which is caused by a low velocity in a portion of the stack. The company is required to keep the VOC emissions from the Doubler at or below 7.3 tons per year. (This emissions number is based on the emissions from the Doubler stack and from the fugitive emissions at the Doubler when the rolling coolant is being applied. The rolling coolant which is added to the sheet is not included in the emissions number. These emissions are included with the rolling mill and annealing oven emissions.)

## 4. Record Keeping - Annealing Ovens #9, #10, #11, #12, #13, #14, #15, #16, #17, and #18

Due to the small amount of VOC emissions from the annealing ovens (the currently approved emission factor is 1.1 pounds VOC per 2000 pounds of aluminum annealed) and due to the allowable emissions rate (1350 pounds per hour and 9000 pounds per day), it is not possible for the company to exceed the allowable emission rates for these ovens. The company shall merely keep the calculations in their records showing that the potential emissions can not exceed the allowable VOC emission limits as specified in Additional Condition #3.a.iii.4. As specified in Additional Condition #3.a.ii, the company may elect to subtract the annealing oven VOC emissions from the rolling mill VOC emissions when determining compliance for the rolling mills. (The VOC emissions from the annealing ovens will be included each year in the Emission Inventory System update. The plant-wide VOC emissions are calculated by

doing a material balance of the rolling coolant and are not affected by the annealing oven emissions calculations.)

## 5. Toxic Air Pollutants

The potential uncontrolled Toxic Air Pollutant emissions, which occur due to impurities in the rolling coolant, are estimated to be 1.0 ton per year or less from the combined operations at the plant and do not exceed the Adjusted Significant Levels specified in Regulations 5.11 and 5.12.

# 6. VOC Shipped on Products and Retained in the Filter Media

The emission factor of 0.0017 pounds VOC per pound of aluminum produced is solely for the residual oil retained in the filter media. No credit is currently being given for the residual oil shipped on products since the company currently anneals practically all of their products.

# **Emission Unit U-4 Description:** 4 Aluminum Scrap Melting Pots

# **Applicable Regulations:**

Federally Enforceable Regulations				
Regulation	Title	Applicable Sections		
1.05	Compliance with Emission Standards and Maintenance Requirements	1, 4.1, 4.1.2, 4.1.2.1, and 5		
6.09	Standards of Performance for Existing Process Operations	1, 2, 3.1, 3.2, 3.3, 3.4, 3.6, and 5		
6.24	Standard of Performance for Existing Sources Using Organic Materials	1.1, 1.1.1, 1.1.3, 1.2, 2, 3.3, 4.2, 5.2, and 7		
6.43	Volatile Organic Compound Emission Reduction Requirements	1, 2, 3, 4, and 6		

District Only Enforceable Regulations			
Regulation	Title	Applicable Sections	
5.11	Standards of Performance for Existing Sources Emitting Toxic Air Pollutants	1, 2, 3, 5, and 6	
5.12	Standards of Performance for New or Modified Sources Emitting Toxic Air Pollutants	1, 2, 3, 4, and 5	
5.14	Hazardous Air Pollutants and Source Categories	1, 2, 3, and 4	

# **Allowable Emissions:**

Emission Pts.	Regulated Air Pollutant	Applicable Regulation	Standard/ Limit
E-24, E-25, E-26, & E-27	VOC	6.24	450 lbs/hr and 3000 lbs/day (All 4 pots combined) See Additional Condition #1.a.i
	PM	6.09	4.99 lbs/hr (All 4 pots combined) See Additional Condition #1.b.i
	Opacity	6.09	20% opacity See Additional Condition #1.b.ii
	TAPs	5.11	See Additional Condition #1.c

### **Components:**

Emission Pt.	Process
E-24	Pot P-1 72 kW Pot (North)
E-25	Pot P-2 72 kW Pot (South)
E-26	Pot P-3 200 kW Pot (North)
E-27	Pot P-4 200 kW Pot (South)

**Control Devices:** There are no control devices on the four melting pots.

#### **Additional Conditions**

1. **Standards** (Regulation 2.16, section 4.1.1)

## a. VOC

- I. The owner or operator shall not allow the combined VOC emissions from the 4 aluminum scrap melting pots to exceed four hundred and fifty (450) pounds per hour or three thousand (3000) pounds per day. (The allowable VOC emissions are based on compliance with section 3.3 of Regulation 6.24 for Class III Solvents using the equipment groupings from the operating permits prior to the Title V permit. The potential emissions from the 4 melting pots are less than the allowable VOC emission limits. See Comment #1.) (Regulation 6.24, section 3.3)
- ii. The owner or operator shall not allow the total VOC emissions to exceed 616.85 tons per calendar year based on the rolling coolant usage for all activities throughout the entire plant. (See Emission Unit Nos. U-1, U-2, & U-3, Comment No. 1 for an explanation of this emission limit.)

#### b. **PM**

The owner or operator shall not allow the combined PM emissions from the 4 aluminum scrap melting pots to exceed 4.99 pounds per hour. (The potential emissions from the 4 melting pots are less than the allowable PM emission limit. See Comment #4.) (Regulation 6.09, sections 3.2, 3.4, &3.6)

#### c. **Opacity**

The owner or operator shall not cause or permit the discharge of emissions equal to or greater than 20% opacity. (Regulation 6.09, sections 3.1 and 3.3)

#### d. **TAPs** (Regulations 5.11 and 5.12)

I. The owner or operator shall evaluate and document process changes to demonstrate that the emission levels established during the previous compliance demonstration are not exceeded. TAPs not included in the

previous compliance demonstration shall also be reviewed. If there is an increase in TAP emission levels (such as, from changing to a new rolling coolant), the owner or operator shall demonstrate, that for the facilities covered by Regulation 5.11, Standards of Performance for Existing Sources Emitting Toxic Air Pollutants, that emissions of any pollutant referenced by Regulation 5.11 will be less than the adjusted significant level (ASL), based on potential to emit (PTE) and that the net increase (the result of algebraic summation of increases and decreases) in emission rate of any pollutant referenced by Regulation 5.12, Standards of Performance for New or Modified Sources Emitting Toxic Air Pollutants, will not exceed the ASL regardless of whether the pollutant of concern was or was not previously emitted. The decreases will be based on representative actual emissions and the increases will be based on PTE. If there is an increase in TAP emission levels, the owner or operator shall demonstrate, that for the facilities covered by Regulation 5.12, that emissions of any pollutant referenced by Regulation 5.12 will be less than the adjusted significant level (ASL), based on potential to emit (PTE).

- ii. The owner or operator shall continue to comply with Regulations 5.11 and 5.12, except for those specific pollutants governed by a MACT standard that is or becomes applicable to this source or pollutant.
- iii. The owner or operator shall not be precluded from requesting that Additional Condition #1.b.i be replaced with another District-approved method of compliance demonstration more suitable to their particular facility and mode of operation.

## 2. **Monitoring** (Regulation 2.16, section 4.1.9.1.2)

#### a. **VOC**

The owner or operator shall calculate the VOC emissions from the 4 aluminum scrap melting pots as specified in Additional Condition #3.a. (Regulation 1.05, Section 4 and Regulation 6.24, section 5.2)

#### b. **PM**

The owner or operator shall calculate the PM emissions from the 4 aluminum scrap melting pots as specified in Additional Condition #3.b.i.

#### c. Opacity

For the 4 melting pots, which are subject to Regulation 6.09 (section 3.1):

- I. To demonstrate compliance with the opacity standard, the owner or operator shall conduct a weekly one-minute visible emissions survey, during normal operation and daylight hours, of Stacks S-27, S-28, and S-29. No more than four Emission Points shall be observed simultaneously.
- ii. For Emission Points without observed visible emissions during twelve consecutive operating weeks, the owner or operator may elect to conduct a monthly one-minute visible emission survey, during normal operation and

- daylight hours. No more than four Emission Points shall be observed simultaneously.
- iii. At Emission Points where visible emissions are observed, the owner or operator shall initiate corrective action within eight hours of the initial observation. If the visible emissions persist, the owner or operator shall perform or cause to be performed a Method 9 for stack emissions or Method 22 for fugitive emissions within 24 hours of the initial observation. If the opacity standard is exceeded, the owner or operator shall report the exceedance to the District, pursuant to Regulation 1.07, and take all practicable steps to eliminate the exceedance. Subsequent visible emission surveys shall be conducted as indicated in Additional Condition #2.c.i.
- d. **TAPs** (Regulations 5.11 and 5.12)

The owner or operator shall demonstrate compliance with Regulation 5.11, Standards of Performance for Existing Sources Emitting Toxic Air Pollutants and Regulation 5.12, Standards of Performance for New or Modified Sources Emitting Toxic Air Pollutants, by complying with Conditions (I) through (iv), below. These conditions are surrogates for hourly emissions records and will monitor ongoing compliance. (See Comment #5.)

The owner or operator shall:

- I. Neither be required to maintain records of nor report TAP emissions.
- Evaluate and document process changes to demonstrate that the emission ii. levels established during the previous compliance demonstration are not exceeded; and make these records available to the District upon request. TAPs not included in the previous compliance demonstration shall also be reviewed. If there is an increase in TAP emission levels (such as, from changing to a new rolling coolant), the owner or operator shall demonstrate, that for the facilities covered by Regulation 5.11, that emissions of any pollutant referenced by Regulation 5.11 will be less than the adjusted significant level (ASL), based on potential to emit (PTE) and that the net increase (the result of algebraic summation of increases and decreases) in emission rate of any pollutant referenced by Regulation 5.12 will not exceed the ASL regardless of whether the pollutant of concern was or was not previously emitted. The decreases will be based on representative actual emissions and the increases will be based on PTE. If there is an increase in TAP emission levels, the owner or operator shall demonstrate, that for the facilities covered by Regulation 5.12, that emissions of any pollutant referenced by Regulation 5.12 will be less than the adjusted significant level (ASL), based on potential to emit (PTE).
- iii. Continue to comply with District Regulations 5.11 and 5.12, except for those specific pollutants governed by a MACT standard that is or becomes applicable to this source or pollutant.
- iv. Not be precluded from requesting that Conditions (I) and (ii) be replaced with another District-approved method of compliance demonstration more suitable to their particular facility and mode of operation.

# 3. **Record Keeping** (Regulation 2.16, section 4.1.9.2)

#### a. **VOC**

The owner or operator shall keep the calculations in their records showing that the potential emissions from the 4 melting pots are less than the hourly allowable and the daily allowable VOC emission limits. No additional compliance record keeping will be required for the melting pots. (See Comment #1.) (Regulation 1.05, Section 4 and Regulation 6.24, section 5.2)

## b. **PM**

The owner or operator shall keep the calculations in their records showing that the potential emissions from the 4 melting pots are less than the hourly allowable PM emission limit. No additional compliance record keeping will be required for the melting pots. (See Comment #4.)

### c. **Opacity**

Records of the results of all visible emission surveys and tests performed shall be maintained and shall include the date and time of the survey; the name of the person conducting the survey; and whether visible emissions were observed. If an Emission Point is not being operated during a given week (or month, as appropriate), then no visible emission survey needs to be performed and a negative declaration may be entered in the record. Records shall be kept of any corrective action taken pursuant to Additional Condition #2.c.iii.

## d. **TAPs** (Regulations 5.11 and 5.12)

- I. The owner or operator shall keep records of the compliance demonstration showing, that for the facilities covered by Regulation 5.11, Standards of Performance for Existing Sources Emitting Toxic Air Pollutants, that the emissions of any pollutant referenced by Regulation 5.11 will be less than the adjusted significant level (ASL), based on potential to emit (PTE). If there is an increase in TAP emission levels (such as, from changing to a new rolling coolant), the owner or operator shall also keep records, for each individual project, showing that the net increase (the result of algebraic summation of increases and decreases) in emission rate of any pollutant referenced by Regulation 5.12, Standards of Performance for New or Modified Sources Emitting Toxic Air Pollutants, will not exceed the ASL regardless of whether the pollutant of concern was or was not previously emitted. The decreases will be based on representative actual emissions and the increases will be based on PTE.
- ii. The owner or operator shall keep records of the compliance demonstration showing, that for the facilities covered by Regulation 5.12, that the emissions of any pollutant referenced by Regulation 5.12 will be less than the adjusted significant level (ASL), based on potential to emit (PTE).

# 4. **Reporting** (Regulation 2.16, section 4.1.9.3)

## a. **VOC**

The potential emissions from the 4 melting pots are less than the allowable VOC emission limits. No compliance reporting shall be required for the 4 melting pots. (See Comment #1.)

#### b. PM

The potential emissions from the 4 melting pots are less than the allowable PM emission limit. No compliance reporting shall be required for the 4 melting pots. (See Comment #4.)

# c. **Opacity**

The owner or operator shall include, at a minimum, the following information in the semi-annual compliance monitoring reports for opacity:

- I. Emission Unit ID number and Stack ID number;
- ii. The beginning and ending date of the reporting period;
- iii. The date, time, and results of each visible emissions survey conducted;
- iv. The date, time, and results of each Method 9 or Method 22 conducted (or a negative declaration if none); and
- v. Description of any corrective action taken pursuant to Additional Condition #2.c.iii.

#### d. **TAPs** (Regulations 5.11 and 5.12)

- I. If there have been process changes which would require the Toxic Air Pollutant emission levels to be reevaluated, the owner or operator shall include the following information along with the semi-annual VOC compliance monitoring report required above:
  - 1) Emission Unit ID numbers and Emission Point ID numbers of the affected equipment;
  - 2) The beginning and ending date of the reporting period;
  - 3) A description of the process changes;
  - 4) The date that the process changes were made; and
  - 5) A summary of the results of the review which was conducted to demonstrate compliance with the emission standards of this permit.
- ii. The owner or operator shall notify the District prior to the use of new rolling oil additives if the company has any uncertainty that their use will comply with District Regulations or the requirements of this permit. (Regulation 5.12, Regulation 6.24, section 2.4, and Regulation 6.43, section 6.2)

## **Comments/Explanations**

1. Due to the small amount of VOC emissions from the melting pots (The currently approved emission factor is 1.65 pounds VOC per 2000 pounds of aluminum melted.) and due to the allowable emissions rate (450 pounds per hour and 3000 pounds per day), it is not possible

for the company to exceed the allowable emission rates for the melting pots. The company shall merely keep the calculations in their records showing that the potential emissions can not exceed the allowable VOC emission limits as specified in Additional Condition #3.a. As specified in Emission Unit U-1, U-2, & U-3, Additional Condition #3.a.ii, the company may elect to subtract the melting pot VOC emissions from the rolling mill VOC emissions when determining compliance for the rolling mills.

- 2. The VOC emissions from the melting pots will be included each year in the Emission Inventory System update. The plant wide VOC emissions are calculated by doing a material balance of the rolling coolant and are not affected by the melting pot emissions calculations.
- 3. The emission factor of 1.65 pounds of VOC per 2000 pounds of aluminum melted was developed by the company based on a laboratory analysis of the amount of residual oil on the aluminum foil.
- 4. Due to the small amount of PM emissions from the melting pots (An emission factor of 1.9 pounds PM per ton of aluminum melted is currently being used to calculate the PM emissions. This factor, which is thought to be an overestimation of the PM emissions, was taken from the AP-42 emission factor for Crucible Furnace Smelting for aluminum.) and due to the allowable emissions rate (4.99 pounds per hour from the combined pots), the potential emissions from the 4 melting pots are less than the allowable emission rate. The company is merely required to keep the calculations in their records showing that the potential emissions are less than the allowable PM emission limits as specified in Additional Condition #3.b.i above. The PM emissions from the melting pots will be included each year in the Emission Inventory System update. Any malfunctions will need to be reported as specified in Regulation 1.07.
- 5. The potential uncontrolled Toxic Air Pollutant emissions, which occur due to impurities in the rolling coolant, are estimated to be 1.0 ton per year or less from the combined operations at the plant and do not exceed the Adjusted Significant Levels specified in Regulations 5.11 and 5.12.
- 6. The melting pots do not have hoods for collecting emissions. The three stacks for ventilating the Melting Pot Room include a roof stack in the northwest corner of the room and two stacks exiting the room near the ground outside the west wall. There is a third structure near the ground outside the west wall. This is an air inlet for the area beneath the melting pots. Additionally, there are two fans in the west wall which provide ventilation.

# Emission Unit U-5 Description: 3 Non-halogenated Cold Solvent Metal Cleaners

# **Applicable Regulations:**

Federally Enforceable Regulations				
Regulation	Title	Applicable Sections		
1.05	Compliance with Emission Standards and Maintenance Requirements	1, 4.1.1, 4.1.2, 4.1.2.1, and 5		
7.18	Standards of Performance for New Solvent Metal Cleaning Equipment	1, 2, 3, 4.1.1, 4.1.2, 4.1.3, 4.2, 4.3, and 4.4		

District Only Enforceable Regulations				
Regulation Title Applicable Sections				
5.12	Standards of Performance for New or Modified Sources Emitting Toxic Air Pollutants	1, 2, 3, 4, and 5		
5.14	Hazardous Air Pollutants and Source Categories	1, 2, 3, and 4		

# **Allowable Emissions:**

Emission Pts.	Regulated Air Pollutant	Applicable Regulation	Standard/ Limit
E-28, E-29, & E-30	VOC	7.18	See Additional Condition # 1.a
	TAPs	5.12	See Additional Condition # 1.b

# **Components:**

Emission Pt. No.	Process	Capacity	Date Installed
E-28	Large Degreaser in Roll Grind Shop	110 gallons	1993
E-29	Small Degreaser in Roll Grind Shop	15 gallons	1993
E-30	Small Degreaser in Oil Reclaim Area	15 gallons	1993

**Control Devices:** There are no control devices on the three cold solvent degreasers.

## **Additional Conditions**

- 1. **Standards** (Regulation 2.16, Section 4.1.1)
  - a. **VOC** (Regulation 7.18, Sections 3 and 4)
    - I. The cleaner shall be equipped with a cover. If the VOC volatility is greater than 15 mm Hg measured at 100EF or if the VOC is agitated or heated, then the cover shall be designed so that it can be easily operated with one hand.
    - ii. The cleaner shall be equipped with a drainage facility such that VOC that drains off parts removed from the cleaner will return to the cleaner. If the VOC volatility is greater than 32 mm Hg measured at 100EF, then the drainage facility shall be internal so that parts are enclosed under the cover while draining. The drainage facility may be external if the District determines that an internal type cannot fit into the cleaning system.
    - iii. A permanent, conspicuous label summarizing the operating requirements specified in 1.a.v shall be installed on or near the cleaner.
    - iv. If used, the VOC spray shall be a fluid stream (not a fine, atomized, or shower type spray) at a pressure that does not cause excessive splashing.
    - v. The owner or operator shall comply with the following operating requirements:
      - 1) Do not dispose of waste VOC or transfer it to another party in a manner that more than 20% by weight of the waste VOC can evaporate into the atmosphere. Store waste VOC only in covered containers;
      - 2) Close degreaser cover whenever not handling a part in the cleaner; and
      - 3) Drain cleaned parts until dripping ceases (15 seconds is usually necessary).
    - vi. The owner or operator shall not operate a cold cleaning degreaser with a solvent vapor pressure that exceeds 1.0 mm Hg (0.019 psi) measured at 20EC (68EF).
  - b. **TAPs** (Regulation 5.12)
    - I. The owner or operator shall evaluate and document process changes to demonstrate that the emission levels established during the previous compliance demonstration are not exceeded. TAPs not included in the previous compliance demonstration shall also be reviewed. If there is an increase in TAP emission levels, the owner or operator shall demonstrate for the 3 parts washers, that emissions of any pollutant referenced by Regulation

5.12, Standards of Performance for New or Modified Sources Emitting Toxic Air Pollutants, will be less than the adjusted significant level (ASL), based on potential to emit (PTE).

ii. The owner or operator shall not be precluded from requesting that Additional Condition 1.b.i be replaced with another District-approved method of compliance demonstration more suitable to their particular facility and mode of operation.

## 2. **Monitoring** (Regulation 2.16, section 4.1.9.1.2)

## a. **VOC**

See Additional Condition #3.a.

b. **TAPs** (Regulation 5.12)

The owner or operator shall demonstrate compliance with Regulation 5.12, Standards of Performance for New or Modified Sources Emitting Toxic Air Pollutants by complying with Conditions (I) through (iii), below. These conditions are surrogates for hourly emissions records and will monitor ongoing compliance.

The owner or operator shall:

- I. Neither be required to maintain records of nor report TAP emissions.
- ii. Evaluate and document process changes to demonstrate that the emission levels established during the previous compliance demonstration are not exceeded; and make these records available to the District upon request. TAPs not included in the previous compliance demonstration shall also be reviewed. If there is an increase in TAP emission levels, the owner or operator shall demonstrate for the 3 parts washers, that emissions of any pollutant referenced by Regulation 5.12 will be less than the adjusted significant level (ASL), based on potential to emit (PTE).
- iii. Not be precluded from requesting that Conditions (I) and (ii) be replaced with another District-approved method of compliance demonstration more suitable to their particular facility and mode of operation.
- 3. **Record Keeping** (Regulation 2.16, section 4.1.9.2)

#### a. **VOC**

- I. The owner or operator shall keep monthly records of the following:
  - 1) The total amount of rolling coolant added to the metal cleaners;
  - 2) The total amount of rolling coolant reclaimed from the metal cleaners;

- 3) The total amount of alternative solvents added to the metal cleaners; and
- 4) The total amount of alternative solvents reclaimed from the metal cleaners.
- ii. The owner or operator shall maintain records that include the following for each purchase:
  - 1) The name and address of the solvent supplier;
  - 2) The date of the purchase;
  - 3) The type of the solvent; and
  - 4) The vapor pressure of the solvent measured in mm Hg at 20EC (68EF).

(Regulation 7.18, section 4.4.2)

- iii. The owner or operator shall maintain records of employee training for the proper operation of this emission unit. These records shall include the following:
  - 1) The date of the training;
  - 2) The name of the person(s) trained; and
  - 3) Who performed the training.
- iv. To further insure compliance with Regulation 7.18 and Regulation 1.05, Section 4, the owner or operator shall inspect each cleaner on a monthly basis and keep records showing whether the following conditions are being maintained:
  - 1) Unit cover is closed when not in use;
  - 2) The drainage rack is in place and clean parts are drained until dripping ceases (minimum 15 seconds); and
  - 3) Labels are in place and legible summarizing operating requirements.
- b. **TAPs** (Regulation 5.12)

The owner or operator shall keep records of the compliance demonstration showing that, for the 3 parts washers, the emissions of any pollutant referenced by Regulation 5.12 will be less than the adjusted significant level (ASL), based on potential to emit (PTE).

4. **Reporting** (Regulation 2.16, section 4.1.9.3)

The owner or operator shall clearly identify all deviations from permit requirements in the semi-annual reports. All reports shall be certified by a responsible official as defined in District Regulation 2.16, section 2.36. If no deviations occur in that reporting period then the owner or operator shall report a negative declaration for each of the following categories.

#### a. **VOC**

The owner or operator shall report semi-annually the following for each emission point:

- I. Emission Unit ID number and Emission Point ID number;
- ii. The beginning and ending date of the reporting period;
- iii. Identification of applicable equipment standard or record; and
- iv. A declaration that the equipment standard or record is being maintained.

## b. **TAPs** (Regulation 5.12)

If there have been process changes which would require the Toxic Air Pollutant emission levels to be reevaluated, the owner or operator shall include the following information along with the semi-annual VOC compliance monitoring report required above:

- I. Emission Unit ID numbers and Emission Point ID numbers of the affected equipment;
- ii. The beginning and ending date of the reporting period;
- iii. A description of the process changes;
- iv. The date that the process changes were made; and
- v. A summary of the results of the review which was conducted to demonstrate compliance with the emission standards of this permit.

Emission Unit U-6 Description: Four (4) 12,000 gallon storage tanks

# **Applicable Regulations:**

Federally Enforceable Regulations			
Regulation	Title	Applicable Sections	
6.43	Volatile Organic Compound Emission Reduction Requirements	1, 2, 3, 4, and 6	
40 CFR Part 60, Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984)	§60.116b (a) and (b)	
7.12	Standard of Performance for New Storage Vessels for Volatile Organic Compounds	1, 2, 7, and 8	

District Only Enforceable Regulations			
Regulation Title Applicable Section			
7.02	Federal New Source Performance Standards Incorporated by Reference	1.23, 2, 3, 4, and 5	

# **Allowable Emissions:**

There is no VOC emissions limit for the storage tanks.

# **Components:**

Emission Pt. No.	Material Stored	Storage Tank Capacity	Installation Date
E-31	Rolling Coolant	12,000 gallons	1991
E-32	Rolling Coolant	12,000 gallons	1991
E-33	Rolling Coolant	12,000 gallons	1991
E-34	No. 2 Fuel Oil	12,000 gallons	1991

**Control Devices:** There are no control devices on the four storage tanks.

# **Additional Conditions**

1. **Standards** (Regulation 2.16, section 4.1.1)

## **VOC**

The storage tanks are subject to Regulation 7.12 and 40 CFR Part 60, Subpart Kb and do not have an allowable VOC emission limit or standard. (Regulation 7.12 does not require the tanks to be equipped with a permanent submerged fill pipe since the true vapor pressure of the VOCs, as stored, is less than 1.5 psia.)

2. **Monitoring** (Regulation 2.16, section 4.1.9.1.2)

## **VOC**

There are no monitoring requirements.

3. **Record Keeping** (Regulation 2.16, section 4.1.9.2)

## **VOC**

The owner or operator shall keep records as specified in 40 CFR Part 60, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984, 60.116b, paragraphs (a) and (b).

4. **Reporting** (Regulation 2.16, section 4.1.9.3)

## **VOC**

The company shall notify the District prior to storing materials other than linear paraffin or fuel oil in the storage tanks.

#### **Permit Shield**

The owner or operator is hereby granted a permit shield that shall apply as long as the owner or operator demonstrates ongoing compliance with all conditions of this permit. Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements of the regulations cited in this permit as of the date of issuance, pursuant to Regulation 2.16, section 4.6.1.

# **Alternative Operating Scenarios**

The owner or operator did not request to operate under any alternative operating scenarios in its Title V permit application.

#### **Off-Permit Documents**

DocumentDateRule Effectiveness Survey18 January 1995Rule Effectiveness Improvement Measures27 April 1995

Source-Wide HAP Speciation			
HAP CAS No. HAP CAS No.			
Benzene	71-43-2	Hexane	110-54-3
Cumene	98-82-8	Toluene	108-88-3
Ethyl benzene	100-41-4	Xylene	1330-20-7

Note: HAPs cited in the table above are those currently known to be present in the rolling coolant as impurities.

## **Insignificant Activities**

Description	Quantity	Basis
Storage Tanks, 5000 gallons each, for used linear paraffin	3	Regulation 2.02, section 2.3.9.2
Storage Tanks, 3000 gallons each, for waste oil, hydraulic oil, & #2 fuel oil	3	Regulation 2.02, section 2.3.9.2
Storage Tank, 2000 gallons, for water-based roll grinding coolant	1	Regulation 2.02, section 2.3.9.2
Storage Tanks, 400 gallons each, for used linear paraffin	2	Regulation 2.02, section 2.3.9.2

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Description	Quantity	Basis
Combustion Sources < 10 MMBTU/hr - Natural gas: 1 Boiler, 4 Hot Water Heaters, 2 Space Heaters & 1 Make-up Air Heater	8	Regulation 2.02, section 2.1.1
Combustion Sources < 10 MMBTU/hr - Natural gas & #2 Fuel Oil: Kewanee boilers, 5.05 MMBTU/hr each	2	Regulation 2.02, section 2.1.1
Research & Development Activities	1	Regulation 2.02 section 2.3.27
Internal Combustion Engines	Various	Regulation 2.02 section 2.2
Brazing, Soldering, or Welding Operation	1	Regulation 2.02 section 2.3.4
Emergency Relief Vents or Ventilating Systems (Not otherwise regulated)	Various	Regulation 2.02 section 2.3.10
Lab Ventilating & Exhausting Systems Non Radioactive Materials	Various	Regulation 2.02 section 2.3.11
Vacuum Distillation Unit, for reclaiming used rolling coolant	1	Negligible emissions
Mill Roll Grinders, using water-based lubricants	Various	Negligible emissions
Baler, for oily scrap	1	See #1 below.
Reclaimed Filter, to filter dirt from used rolling coolant prior to distillation	1	Negligible emissions
Cooling Tower	1	See #2 below.
Usage of Lubricants in Spray Cans	1	Negligible emissions

- 1. No rolling coolant is added at this process. Any VOC emissions would be due to residual rolling coolant carryover from earlier processes.
- 2. Chromium-based water treatment chemicals are not used; therefore 40 CFR Part 63, Subpart Q, National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers does not apply.
- 3. Insignificant Activities are only those activities or processes falling into the general categories defined in Regulation 2.02, Section 2, and not associated with a specific operation or process for which there is a specific regulation. Equipment associated with a specific operation or process (Emission Unit) shall be listed with the specific process even though there may be no applicable requirements. Information contained in the permit and permit summary shall clearly indicate that those items identified with negligible emissions have no applicable requirements.
- 4. Activities identified in Regulation 2.02, Section 2, may not require a permit and may be insignificant with regard to application disclosure requirements but may still have generally applicable requirements that continue to apply to the source and must be included in the Title V permit.
  - a. No facility, having been designated as an insignificant activity, shall be exempt from any generally applicable requirement which shall include a 20% opacity limit for

facilities not otherwise regulated.

b. No periodic monitoring shall be required for facilities designated as insignificant activities.